



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First named inventor: **Karri Ranta-Aho**
Serial No.: **10/648,778**
Filed: **Aug. 25, 2003**
Group Art Unit: **2617**
Confirmation No.: **4032**
Examiner: **Marcos L. Torres**

Mail Stop AF
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

In response to the final Office Action of August 4, 2009, please reconsider the rejections in view of the following remarks:

******If any fee and/or extension is required in addition to any enclosed herewith, please charge Account No. 23-0442.***

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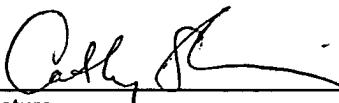
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REMARKS

Claims 1-28 and 30-43 were examined by the Office, and in the final Office Action of August 4, 2009 all claims are rejected. With this paper, no claims are amended, added or cancelled, so that claims 1-28 and 30-43 remain in the application. Applicant respectfully submits that the Office has committed clear error in rejecting the claims, because the Office has failed to show that the cited references disclose or suggest all of the limitations recited in the claims. Accordingly, applicant respectfully requests reconsideration and withdrawal of the rejections in view of the following discussion.

Claim Rejections under 35 USC §103

In section 9, on page 4 of the Office Action, claims 1-5, 10-16, 19-21, 26-28, 30-40 and 42-43 are rejected under 35 USC §103(a) as being unpatentable over 3GPP; Technical Specification Group Radio Access Network; Feasibility Study for Enhanced Uplink for UTRA FDD; (R. 6) 3GPP TR 25.896 V0.3.2. (hereinafter TR 25.896) in view of Souissi (U.S. Appl. Publ. No. 2002/0075941). Applicant respectfully submits that claim 1 is not disclosed or suggested by the cited references, because the cited references, alone or in combination, fail to disclose or suggest all of the limitations recited in claim 1. The cited references at least fail to disclose or suggest signaling in the uplink information indicating one of the cells as a scheduling cell, each Node B receiving the uplink indicating one of the cells as the scheduling cell, and each Node B determining whether the Node B is in control of the scheduling cell, as recited in claim 1. For at least these reasons, claim 1 is not disclosed or suggested by the cited references.

The Office asserts in section 2 of the Office Action that Souissi discloses that in negotiation the node B are receiving a communication indicating one of the cells as the scheduling cell (so the other nodes know who is the master). However, applicant respectfully disagrees, because there is only one node receiving such communication, not a plurality, since the piconet with its master node is established with the first two nodes vying for control. In Souissi, when no picocell is established, two nodes wishing to establish a picocell determine which of the two is to be the master node. See Souissi paragraph [0082]. The first node to transmit is implied to be the master, and the reception of this transmission by the second node then indicates the first node as the master node and the second node as the slave node. Therefore, it is the first node that indicates itself as the master node, because the negotiation is between two cells. See Souissi paragraph [0082]. However, in contrast to Souissi the present application does not teach that the user equipment is a node. Accordingly, the limitation that the user equipment device signaling in an uplink information indicating one of the cells as a scheduling cell does not correspond to a node indicating itself as a master node as in

Souissi. In contrast to Souissi, claim 1 states that the user equipment, which is not one of the cells but is a slave to those cells, selects the scheduling cell out of a plurality of cells that have scheduling control over the user equipment. Therefore, claim 1 requires at least a user equipment and two Node Bs, where the user equipment selects among at least two master nodes, i.e. Node Bs. However, Souissi fails to disclose or suggest that a user equipment would select a master node from a plurality of master nodes, not including itself, and signal that selection to those nodes, as recited in claim 1.

Furthermore, the Office has failed to address applicant's arguments with respect to the uplink limitation recited in claim 1. It is clear from Souissi, which is related to adhoc piconets, that the two devices negotiating for the position of master device are peer devices. Communications between two such devices are therefore not an uplink communication, but peer-to-peer communications. Even if it is asserted that the first master slave transmission creates a de-facto up and downlink in advance of the master-slave establishment, then the first communication of the first node de-facto establishing itself as the master node over the second node involved in the negotiation would be a downlink communication (master → slave) and not an uplink communication.

The Office also argues with respect to Figure 1 of Souissi that node 25 indicating to node 28 that it is the master of a piconet constitutes an uplink signaling indicating one of the cells as a scheduling cell. While this may be considered to be uplink signaling, this signaling does not correspond to the user equipment signaling information indicating one of the cells as a scheduling cell, as recited in claim 1. Instead, it merely signals that the node itself is a master node, which is in contrast to the present application where the user equipment itself is not a Node B, and therefore Figure 1 cannot be read on the user equipment identifying itself as a scheduling cell. In addition, such an indication can also not be combined with the other limitations of claim 1, because each Node B, i.e. node 25 receiving the indication as asserted by the Office, could not possibly meet the further limitations of claim 1, since node 25 is not part of the scheduling cell which node 28 signals itself to be the master node. There is no reason why node 25 would evaluate whether or not it is the scheduling cell to node 28, when it receives an indication from node 28 that node 28 is the master node of another piconet. Souissi is actually silent on whether master nodes in one picocell identify themselves as such in other picocells of which they are a member. The Office appears to infer this from Figure 1. However, Souissi merely suggests that the hopping pattern selected by the master nodes are communicated so that node 28 and node 29 would merely be informed of the hopping pattern established by node 25. It should also be noted that the scatter-net creation from separate picocells and the creation of a single picocell from two nodes negotiating which one is the master

are completely separate processes, so that the uplink signaling in the first process, even if Souissi would have taught or suggested it, cannot be properly used as replacement for the downlink signaling in the second process.

In addition, claim 1 is directed to a method of a user equipment signaling one of a plurality of Node Bs involved in a soft handover as the scheduling cell for the user equipment. Node 25 identifying itself as a master node of a picocell to master node 28 of another picocell does not involve any such process or make such process obvious. It is therefore inappropriate to suggest that the combination of the 3GPP specification and the negotiation of a master cell between two peer nodes or the identification of a node as being a master node in one picocell to another master node in another picocell would lead one skilled in the art to the combination of a user equipment selecting and signaling which of a plurality of base stations involved in a soft handover is to be the scheduling cell for the user equipment, as recited in the present application.

Furthermore, the present application is directed to solving the problem of a user equipment having multiple base stations controlling the user equipment during a soft handover, which may lead to the user equipment receiving conflicting scheduling information from these basestations to update the UE pointer. However, this problem is not addressed in Souissi. Instead, in Souissi, the addressed issue is how to select a master node between two adhoc peer nodes when none has been selected yet and with reference to Figure 1 how to connect established picocells with nodes being part of multiple piconets and how to avoid data collisions from different nodes. Neither teaching of Souissi can be combined with the 3GPP specification to arrive at the limitations recited in claim 1. Souissi discusses avoiding transmission collisions from different nodes among others when hopping patterns of these nodes overlap, but does not teach or suggest any method of avoiding conflicting scheduling information from multiple master nodes. In particular, Souissi does not disclose or suggest that a node such as node 29 of Figure 1 that receives scheduling information from two master nodes should signal one of the two master nodes to be the scheduling node and the other master node to stop scheduling for node 29. Since master/slave "scheduling" in Souissi merely refers to synchronization of the hopping pattern, such a teaching would de-facto mean that node 29 would lose synchronization with the master node indicated to stop scheduling, which would teach away from Souissi's objective of avoiding collisions between cells by promoting exchange of hopping sequences between picocells. See Souissi paragraph [0041].

The Office also argues that the motivation to combine would be orderly using network resources, thereby maximizing resources and preventing data collision. However, the present application is not directed to these issues, because the user equipment cannot possibly create

resource conflicts or data collisions with itself. Instead, the present application is directed to avoiding scheduling conflicts of updating a pointer at a user equipment subject to multiple controlling Node Bs. Therefore, the Office has relied upon hindsight reasoning based on the applicant's own disclosure to provide the motivation to combine the cited references to arrive at the claimed limitations. For at least the reasons discussed above, claim 1 is not disclosed or suggested by the cited references.

The independent claims rejected above, contain limitations similar to those recited in claim 1. Therefore, for at least the reasons discussed above, the independent claims are not disclosed or suggested by the cited references.

The claims rejected above, and depending from the above mentioned independent claims are not disclosed or suggested at least in view of their dependencies.

In section 10, on page 19 of the Office Action, claims 6-9, 17-18, 22-25 and 41 are rejected under 35 USC §103(a) as being unpatentable over 3GPP; Technical Specification Group Radio Access Network; Feasibility Study for Enhanced Uplink for UTRA FDD; (R. 6) 3GPP TR 25.896 V0.3.2. (hereinafter TR 25.896) in view of Souissi, and in further view of admitted prior art. The rejected claims all ultimately depend from an independent claim, and therefore are not disclosed or suggested by least in view of their dependencies.

CONCLUSION

It is believed that all of the claims of the application are in condition for allowance and their passage to issue is earnestly solicited. The undersigned hereby authorizes the Commissioner to charge Deposit Account No. 23-0442 for any fee deficiency required to submit this response.

Respectfully submitted,

20 October 2009

Date

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PRE-APPEAL BRIEF REQUEST FOR REVIEW

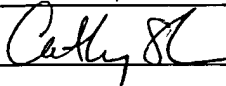
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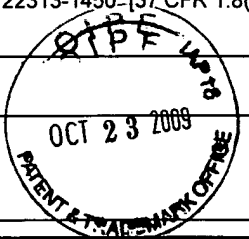
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on 10.20.09

Signature



Typed or printed name Cathy Sturmer



Application Number

10/648,778

Filed

August 25, 2003

First Named Inventor

Rakki RANTA-AHO

Art Unit

2617

Examiner

Marcos L. TORRES

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

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attorney or agent of record.

Registration number 58,051

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attorney or agent acting under 37 CFR 1.34.

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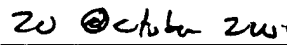
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Keith R. Obert

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Date

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*Total of _____ forms are submitted.

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